

METHOD AND APPARATUS FOR MINE AND UNEXPLODED ORDNANCE NEUTRALIZATION

ABSTRACT

A method for neutralization of the explosive content of mines and UXO by essentially completely consuming the explosive by combustion or decomposition before any explosion occurs. A charge of a compound that reacts with an extremely high heat-release rate is ignited on or near the casing of the device to be neutralized. The intense exothermic reaction generates high temperature combustion products that will disrupt the casing, thus leading to combustion or decomposition of the explosive. The holes melted in the mine casing enable ignition of a large area of the explosive charge and provide easy access for atmospheric air to support active burnout of the explosive. The apparatus comprises the compound that reacts with a high heat release rate, an ignition source, and a container for the assembly.